



UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/422,378 10/21/99 SHIMODA

T 9319T-000011

MM91/0727

HARNES DICKEY & PIERCE PLC  
P O BOX 828  
BLOOMFIELD HILLS MI 48303

EXAMINER

WILLIAMS, K

ART UNIT	PAPER NUMBER
----------	--------------

2854

10

DATE MAILED:

07/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/422,378	SHIMODA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin D. Williams	2854	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 May 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
  - 4a) Of the above claim(s) 10,12 and 19-26 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9,11 and 13-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 October 1999 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
 

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6,7.
- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other:

**DETAILED ACTION**

1. Applicant's election of the species of figure 1 in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

***Claim Objections***

2. Claims 3-7 and 14-18 are objected to because of the following informalities:

In claim 3, line 2, it seems that "on outer" should be --on an outer--.

In claim 4, line 2, it seems that "on outer" should be --on an outer--.

In claim 4, line 4, it seems that "and other" should be --and another--.

In claim 4, line 5, it seems that "on outer" should be --on an outer--.

In claim 14, line 2, it seems that "on outer" should be --on an outer--.

In claim 15, line 2, it seems that "on outer" should be --on an outer--.

In claim 15, line 4, it seems that "and other" should be --and another--.

In claim 15, line 5, it seems that "on outer" should be --on an outer--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Wen et al. (6,064,410).

Wen teaches an electronic paper printer comprising a plurality of capsules 220 inside of which charged particles move by applying an electric field, a head 40 for describing display patterns, having a curved shape, a plurality of pixel electrodes 80 being deployed in a matrix arrangement (Fig. 2), and a common electrode 90.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. in view of Vincent (5,866,284).

Wen teaches the claimed invention except for the head being configured by at least a pair of drums.

Vincent teaches an electronic paper printer comprising a head being configured by at least a pair of drums 210,250.

Art Unit: 2854

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wen to have the pair of drums as taught by Vincent, in order to reduce the risk of damage to the sheet by providing drums which can roll with the conveyance of the sheet.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. in view of Vincent as applied to claims 2-5 above, and further in view of Haas et al. (6,100,909).

Wen in view of Vincent teach the claimed invention except for the plurality of switching elements.

Haas teaches an electronic paper printer comprising a plurality of switching elements.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wen in view of Vincent to have the plurality of switching elements as taught by Haas, in order to accurately control the image forming process.

8. Claims 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Vincent.

Vincent teaches an electronic paper printer comprising a plurality of capsules 100 inside of which charged particles move by applying an electric field, and a drum-shaped head comprising a describing head 210,250 and an erasing head 230.

9. Claims 11 and 13-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. in view of Vincent.

Wen teaches the claimed invention except for an erasing head and at least one head being configured by a pair of drums.

Vincent teaches an electronic paper printer comprising an erasing head 230 and at least one head being configured by a pair of drums 210,250,230.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wen to have an erasing head as taught by Vincent in order to have the convenience of rewriting on the same paper.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wen to have the pair of drums as taught by Vincent, in order to reduce the risk of damage to the sheet by providing drums which can roll with the conveyance of the sheet.

10. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. in view of Vincent as applied to claims 11 and 13-16 above, and further in view of Haas et al.

Wen in view of Vincent teach the claimed invention except for the plurality of switching elements.

Haas teaches an electronic paper printer comprising a plurality of switching elements.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wen in view of Vincent to have the plurality of switching elements as taught by Haas, in order to accurately control the image forming process.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 6,177,947 to Wen et al., 5,640,189 to Ohno et al., and 5,065,171 to Miyake et al. disclose similar devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (703) 305-3036. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John S. Hilten can be reached on (703) 308-0719. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-4399 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KDW  
July 26, 2001



JOHN S. HILTEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800